Short-term safety, efficacy and mode of action of apremilast in moderate suppurative hidradenitis suppurativa: a randomised double-blind placebo controlled trial.

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Primary objectives: To evaluate the expression of inflammatory cytokines in HS lesional skin at week four (t=4) and week sixteen (t=16): - of subjects receiving apremilast compared to subjects receiving placebo;- within both groups relative to...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Epidermal and dermal conditions
Study type	Interventional

Summary

ID

NL-OMON42894

Source
ToetsingOnline

Brief title
Mode of action apremilast in HS - SMASH trial

Condition

- Epidermal and dermal conditions

Synonym
acne ectopica, acne inversa

Research involving
Human

Sponsors and support

Primary sponsor: Erasmus MC, Universitair Medisch Centrum Rotterdam
Source(s) of monetary or material Support: Ministerie van OC&W,Celgene,Celgene Corporation

Intervention

Keyword: Apremilast, Hidradenitis Suppurativa, Translational study

Outcome measures

Primary outcome

The expression levels of inflammatory cytokine protein and mRNA in HS lesional skin will be analysed atweek four (t=4) and week sixteen (t=16) and compared between groups (apremilast and placebo). In addition, the expression levels at t=16 for each separate group will be compared relative to baseline (t=0). The proteins and genes of interest to be measured are IL-1β, IL-6, TNF-α, IL-10, IL-12, IL-23, IL-17A and IL-17F , IFN-γ, IL-31. Exactly the same cytokines will be measured using ELISA and qPCR.

Secondary outcome

The clinical efficacy will be measured using the following scoring systems:

• Individual inflammatory lesion count

• HS-Physician Global Assessment (HS-PGA)

• Hidradenitis Suppurativa Clinical Response (HiSCR)

The patient reported outcomes will be measured using the following scoring sytems:

• NRS to assess pain, pruritus and patient disease global assessment score

• DLQI

Other study parameters

The following safety and tolerability parameters will be assessed:

• Vital signs: heart rate, blood pressure, temperature.

• Adverse events (every visit).

• Safety laboratories: WBC (white blood cell count), ANC (absolute neutrophil

count), Hemoglobin, Platelets, Serum Creatinine, ALT, Alkaline phosphatase.

Study description

Background summary

Hidradenitis suppurativa (HS) is a chronic, inflammatory, recurrent, debilitating skin disease. It is characterized by painful, deep-seated, inflamed boils in the inverse areas of the body, most commonly the axillae, inguinal and anogenital regions.
Systemic therapy with immunosuppressive agents (systemic corticosteroids, dapsone, cyclosporin) has been investigated in the past decades and have shown limited efficacy. The use of the selective immunosuppressant apremilast has not yet been evaluated in HS. A phase II clinical trial on the clinical efficacy is currently running in the USA. We hypothesize a beneficial effect of apremilast in HS patients, similar to the efficacy of apremilast in psoriasis patients. Namely, it has been shown that the immune dysregulation in the pathogenesis of HS shows many similarities with that of psoriasis. Moreover, the TNF-α blocker adalimumab was registered for HS after approval for the treatment in patients with psoriasis.

Study objective

Primary objectives: To evaluate the expression of inflammatory cytokines in HS lesional skin at week four (t=4) and week sixteen (t=16):
- of subjects receiving apremilast compared to subjects receiving placebo;
- within both groups relative to baseline (t=0).

Secondary objectives:
- To prospectively evaluate the clinical efficacy of apremilast.
- To assess the effect of apremilast on patient reported outcomes measures.
- To assess the short-term safety and tolerability of apremilast in patients with hidradenitis suppurativa.

Study design

A double-blind randomised placebo-controlled trial; both interventional (Phase II) and translational.

Intervention

Investigational product/treatment: Apemilast (Otezla)
Apremilast treatment for fifteen (n=15) subjects, and five (n=5) subjects receiving placebo.

The duration of treatment with either apremilast or placebo per subject is 16 weeks.

Study burden and risks

Eligible patients will be recruited during routine clinical care. There is a total of 7 site visits. The screening comprises a serum test and for women also a pregnancy test. Twenty subjects will be allocated to treatment with either apremilast (N=15; 75%) or placebo (N=5; 25%). Per subject a total number of four blood samples and four biopsies will be obtained. Participants will be asked to fill in the DLQI and NRS scores six times. Clinical photographs (optional) will be taken on three occasions and the vital signs measured five times. At every visit a short medical exam will be done and patients will be asked about possible side effects.

Contacts

Public
Erasmus MC, Universitair Medisch Centrum Rotterdam

Burg. s' Jacobplein 51
Rotterdam 3015 CA
NL
Scientific
Erasmus MC, Universitair Medisch Centrum Rotterdam

Burg. s' Jacobplein 51
Rotterdam 3015 CA
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

adult (>= 18 years of age) male or female patients with moderate HS according to a PGA of 3 on the 5-point HS-Physician Global Assessment (HS-PGA); HS of more than 6 months duration; have lesions in at least two anatomical locations.

Exclusion criteria

Contraindication for apremilast; previous use of apremilast; have any current and/or recurrent clinically significant skin condition in the treatment area other than HS; presence of other uncontrolled major disease; pregnant or lactating women

Study design

Design

Study phase:	2
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	23-02-2017
Enrollment:	20
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Otezla
Generic name:	apremilast
Registration:	Yes - NL outside intended use

Ethics review

Approved WMO

Date:	23-01-2017
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
EudraCT	EUCTR2016-000859-27-NL
CCMO	NL57003.078.16